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APPLICATION NO.	FT	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	TTORNEY DOCKET NO. CONFIRMATION NO. 54407USA6B,006 9447	
09/822,651	(03/30/2001	Scott J. Tuman	54407USA6B,006		
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3M INNOVATIVE PROPERTIES COMPANY				EXAM	EXAMINER	
PO BOX 33 ST. PAUL,		3-3427		TSOY, ELENA		
				ART UNIT	PAPER NUMBER	
				1762		
				DATE MAILED: 07/30/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	- LT					
	09/822,651	SEIDEL ET AL.						
Office Action Summary	Examiner	Art Unit						
	Elena Tsoy	1762						
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence addr s	5					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status								
1) Responsive to communication(s) filed on 11 J	<u>uly 2003</u>							
2a)☐ This action is FINAL . 2b)⊠ Thi	is action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims								
4)⊠ Claim(s) <u>21-48 and 50-70</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>21-48 and 50-70</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or Application Papers	election requirement.							
9) The specification is objected to by the Examiner								
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents	have been received in Application	on No						
 3. Copies of the certified copies of the priori application from the International Bure * See the attached detailed Office action for a list of 	eau (PCT Rule 17.2(a)).	_	;					
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e) (to a provisional appli	cation).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17 	5) Notice of Informal P	(PTO-413) Paper No(s)atent Application (PTO-152)	<u> </u>					

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Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 1. CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 11, 2003 has been entered.

Response to Amendment

Amendment filed on July 11, 2003 has been entered. New claims 56-70 have been added. 2. Claims 21-48, 50-70 are pending in the application.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 61 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 61, lines 1-2, "wherein at least one discrete polymeric region comprises a plurality of discrete polymeric regions on the first side of the nonwoven web" renders the claim indefinite. For examining purposes the phrase was interpreted as "wherein at least one discrete polymeric region comprises a plurality of stems extending from the at least one discrete polymeric regions on the first side of the nonwoven web".



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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 21-31, 33-35, 37, 39, 40, 42-48, 50-53, 55 stand rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (US 5,586,371) for the reasons of record as set forth in Paragraph No. 5 of the Office Action mailed on October 16, 2002 (Paper No. 11).
- 8. Claims 32, 41, 54 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,586,371) in view of Murasaki (US 5,643,651) for the reasons of record as set forth in Paragraph No. 8 of the Office Action mailed on October 16, 2002 (Paper No. 11).
- 9. Claim 36 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,586,371) for the reasons of record as set forth in Paragraph No. 9 of the Office Action mailed on October 16, 2002 (Paper No. 11).

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- 10. Claim 38 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,586,371) in view of Shepard et al (US 6,205,623) for the reasons of record as set forth in Paragraph No. 10 of the Office Action mailed on March 27, 2003 (Paper No. 14).
- 11. Claims 21-26, 28-31, 33, 39, 40, 42-48, 50-53, 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Wessels et al (US 5,669,120).

Wessels et al disclose a mechanical fastener for the use in diapers (See column 2, line 4) formed from a web construction comprising a substrate sheet (web) of a coarse woven or knit (elastic) structure having pores large enough to pass molten resin material throughout its entire area, and the hook and loop elements existing mixedly on the one surface of the substrate sheet as plurality of stripes (patches) (See Fig. 4E; column 3, lines 24-37). Thus, a mechanical fastener comprises an elastic substrate web; discrete polymeric regions (patches, stripes) fused to a first side of the substrate web; a plurality of hooks (stems) extending from each discrete polymeric region of the plurality of discrete polymeric regions, a plurality of loop structures adapted to lock with the plurality of hooks. The plurality of hooks are oriented at angle that is not normal to web plane in the same direction (See Fig. 4E). The web construction may be of composite structure such as shown in Fig. 4F.

12. Claims 21, 23, 27, 30, 31, 38-40, 44 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cejka et al (US 6,106, 922).

As to claims 21, 23, 27, 30, 39, 44, Cejka et al disclose a mechanical fastener <u>hook</u> structures (See column 3, lines 25-26) comprising a stemmed web construction 10 having a <u>plurality of stems</u> extending from <u>at least one side</u> of the web (See column 1, lines 6, 61-63) and comprising a first layer 16/22 coextensive with the web construction 10; a continuous second layer 14 joined to the first layer 16/22 while they are both molten (fused) (See column 2, lines 1-2, 25-

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33). In another embodiment, one of the layers is <u>discontinuous</u> and includes a <u>plurality of portions</u> (discrete polymeric regions) of the respective material unconnected with other portions of the same respective material; the portions having shapes selected from the group of rods, prisms, spheres (patches), parallelepipeds, irregular angular shapes, and irregular curved shapes (See Figs. 5, 7; column 2, lines 9-15; column 4, lines 66-67; column 5, lines 65-67; column 6, lines 1-5). In other alternative embodiments, both surfaces of the web can have stems, and one or more of these stems can have caps (See column 2, lines 15-18). The discontinuous portions can be formed of an elastic material. They can be <u>elastic continuous regions encased in continuous outer layers</u> to provide local stretchable regions. See column 6, lines 5-13. A plurality of stems 12, with or without heads, can be formed on both sides of the web 10 (See Fig. 8; column 6, lines 13-18).

If difference exists, i.e. Cejka et al do not expressly show that the plurality of stems is formed on the discontinuous portions so that a plurality of stems extend from each of the discrete polymeric regions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed a web so that a plurality of stems extend from each of the discrete polymeric regions since Cejka et al teach that stems may be formed on any side of the web.

As to claims 31, 40, the plurality of stems is oriented at an angle that is <u>not normal</u> to the web plane (See column 5, line 56).

As to claim 38, each stem of the plurality of stems comprises a mushroom head (See column 5, line 57).

13. Claims 29, 34-37, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cejka et al (US 6,106, 922).



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Cejka et al, as applied above, fail to teach that the plurality of discontinuous discrete regions comprises a plurality of stripes extending over the first major side of the web (Claims 29, 43) or patches (Claim 30); the plurality of discontinuous discrete regions is separated from one another by an average of approximately 0.05-30 centimeters (Claim 37); the plurality of discontinuous discrete regions covers between 1 and 99 % of the first side of the web (Claim 34), between 20 and 80 % of the first side of the web (Claim 35), or between 5 and 25 % of the first side of the web (Claim 36).

It would have been an obvious matter of design choice to make discontinuous discrete regions Cejka et al of any desirable size and pattern including claimed patch or stripe pattern (including those of claims 29, 30, 43) or claimed coverage of the web (including those of claims 34-37) depending on the particular application of end product in the absence of a showing of criticality.

14. Claims 32, 41, 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al (US 5,669,120) in view of further in view of Murasaki (US 5,643,651).

Wessels et al are applied here for the same reasons as above. Wessels et al fail to teach that the plurality of stems is oriented in multiple directions.

Murasaki teaches that a plurality of stems oriented at an angle that is not normal to the plane of the web in multiple directions provides a fastener with no directivity in engaging strength (See column 7, lines 53-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made a hook material of a fastener in Wessels et al having stems that are angled in multiple directions with the expectation of providing the fastener with no directivity in engaging strength depending on particular use of a final product, as taught by Murasaki.

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15. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al (US 5,669,120).

Wessels et al, as applied above, fail to teach that the plurality of discrete regions is separated from one another by an average of approximately 0.05-30 centimeters (Claim 37); the plurality of discontinuous discrete regions covers between 1 and 99 % of the first side of the web (Claim 34), between 20 and 80 % of the first side of the web (Claim 35), or between 5 and 25 % of the first side of the web (Claim 36).

It would have been an obvious matter of design choice to make discrete regions in Wessels et al of any desirable pattern and coverage of the web (including those of claims 34-37) depending on the particular application of end product in the absence of a showing of criticality.

16. Claims 40, 42-48, 50-53, 55, 56, 58-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al (US 5,669,120) in view of Allen et al (US 5,547,531).

As to claims 40, 42-48, 50-53, 55, 56, 58-61, 66-70, Wessels et al are applied here for the same reasons as above. Wessels et al fail to teach that the web construction comprises non-woven elastic material.

Allen et al teach that a composite female component of the fastening device for the use in diapers (See column 4, lines 6-7) comprising a non-woven fibrous web joined to an elastic backing provides a low cost loop fastening material instead of conventional knit or woven fabric (See Figs. 1, 4; column 1, lines 68; column 2, lines 1-24; column 3, lines 6-12; column 5, lines 46-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed a web of Wessels et al using a composite female component comprising

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a non-woven fibrous web joined to an elastic backing with the expectation of providing the desired low cost, as taught by Allen et al.

As to claims 62-65, Wessels et al in view of Allen et al fail to teach that fail to teach that the plurality of discrete regions is separated from one another by an average of approximately 0.05-30 centimeters (Claim 62); the plurality of discontinuous discrete regions covers between 1 and 99 % of the first side of the web (Claim 63), between 20 and 80 % of the first side of the web (Claim 64), or between 5 and 25 % of the first side of the web (Claim 65).

It would have been an obvious matter of design choice to make discrete regions in Wessels et al of any desirable pattern and coverage of the web (including those of claims 34-37) depending on the particular application of end product in the absence of a showing of criticality.

Response to Arguments

17. Applicants' arguments filed July 11, 2003 have been fully considered but they are not persuasive.

Applicants argue that Thomas doe not disclose all limitations of the claimed invention.

The Examiner respectfully disagrees with this argument. Thomas discloses all limitations of the claimed invention because a **row** of a hook component is a discrete polymeric portion so that a plurality of stems extends from each of the <u>plurality of rows</u> (discrete portions) of the hook component. Thus, Thomas reads on claim language.

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Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elena Tsoy

Elena Tsoy Examiner Art Unit 1762

July 25, 2003